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SHUNSENNIA TARSALIS, A NEW GENUS AND SPECIES OF CHIGGER FROM KOREA (ACARINA: TROMBICULIDAE)[1]

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Three specimens of a trombiculid mite from Korea constitute a new genus and species of Leeuwenhoekiinae. In this new genus we also place *Hannemania ochotona*[3] Radford, 1942, a species known from western North America.

Shunsennia, new genus

Chelicera with a single, subapical dorsal tooth. Palpal claw 3-4 pronged. Spiracles and trachea absent. All tarsi with two claws and a claw-like empodium. Scutum with no anteromedian projection. Sensillae flagelliform. *Genotype: Shunsennia tarsalis,* new species.

This genus is most closely allied to *Chatia* Brennan, 1946, a monotypic genus (type: *Chatia setosa* Brennan) known from small mammals of Western North America. In the key included by Wharton et al (1951) specimens of *Shunsennia tarsalis* and *Hannemania ochotona* will key out to *Chatia. Shunsennia* is easily separated from *Chatia* by the 3-4 pronged palpal claw and the claw-like empodium; in *Chatia* the palpal claw has 7 or more prongs and there is no empodium. *Shunsennia* differs from all other Leeuwenhoekiinae in lacking both an anteromedian projection on the scutum and a row of teeth on the chelicerae. *Leeuwenhoekia* lacks a row of teeth on the chelicerae, but possesses an anteromedian projection on the scutum.

Shunsennia tarsalis, new species

(Figure 1)

Gnathosoma: Capitular sternum and palpal femur with punctae; coxal seta and femoral seta feathered. Palpal genual seta densely feathered; dorsal tibial seta densely feathered, lateral tibial seta long and with 2-7 small barbs, and ventral tibial seta densely feathered. Palpal claw three-pronged. Galeal seta feathered. Chelicera with a subterminal hook. Palpal thumb with seven densely feathered setae and a short, slender spur (about as long as the width of the thumb).

Scutum: More or less rectangular; anterior and posterior margins with marked mesal convexities. Scutal setae all of approximately the same thickness and quality. Sensillae nude. A single, well-developed eye on each side of the scutum. Scutal measurements of holotype:

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[3]Radford's spelling of his specific name was "ochotrona." However, inasmuch as Radford recorded the pika as the host of his material, the emendation in spelling, to conform to the generic name of the host, appears justified.

AW-83, PW-106, SB-35, ASB-61, PSB-20, AP-46, AM-84, AL-76, PL-126, S-109.

Legs: Coxal setae 2-1-1. Legs with feathered and nude (specialized) setae as illustrated. As indicated (Fig. 1), there is considerable variation in the degree of feathering on the leg setae. With the following specialized setae: Leg I, 1 genuala, 1 microgenuala; 2 tibiala, 1 microtibiala; 1 spur, 1 microspur, 1 subterminala, 1 pretarsala. Leg II, 1 genuala, 1 microgenuala; 2 tibiala; 1 spur, 1 microspur, 1 pretarsala. Leg III, 1 tibiala; 1 spur.

Setae: As in *Chatia setosa,* the dorsal setae are numerous and in rather poorly defined rows; dorsal setae about 130-140. There are no setae that can be definitely termed humeral setae. Ventral setae smaller, about 80-90 in number. Two pairs of sternal setae, between coxae III and slightly anterior.

Types: Holotype taken from a Korean mouse, probably *Clethrionomys rufocanus regulus* (Thomas), taken about 15 miles north-west of Wonju (CS 846 443), 13 March 1952, by members of the 207th Preventive Medicine Survey Detachment, no. C-82; deposited in the United States National Museum. One paratype with the same data as the holotype, deposited in the Rocky Mountain Laboratory, Hamilton, Montana. One paratype from *Apodemus agrarius coreae* Thomas, about 10 miles west of Chunchon, Korea (CS 725 928), 16 February 1952, collected by the 37th Preventive Medicine Company, no. 166; deposited at the Medical Zoological Laboratory, Institute for Infectious Diseases, University of Tokyo.

Specimens upon which this descriptoin is based were taken near Chunchon, Korea, but the pronunciation of Chunchon in Japanese is Shunsen, and hence the generic name *Shunsennia.*

Shunsennia tarsalis is closely allied to *Hannemania ochotona* Radford, a chigger found on rodents and lagomorphs in the mountains of western North America; and *Hannemania ochotona* is therefore transferred to *Shunsennia.* From the genotype, *ochotona* is distinguished by the minute basal barbs on the sensillae, a 4-pronged palpal claw, sternal setae 2-4 (sometimes arranged 2-2-2), the absence of a spur on tarsus III and the presence of more than one (usually three) setae on coxa III.

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LITERATURE CITED

Brennan, James M., 1946. A new genus and species of chigger, Chatia setosa (Trombiculidae, Acarina), from northwestern United States. Jour. Parasit. 32: 132-135.

Radford, Charles D., 1942. The larval trombiculinae (Acarina, Trombidiidae) with descriptions of twelve new species. Parasitology 34: 55-81.

Wharton, G. W., et al., 1951. The terminology and classification of trombiculid mites (Acarina: Trombiculidae). Jour. Parasit. 37: 13-31.

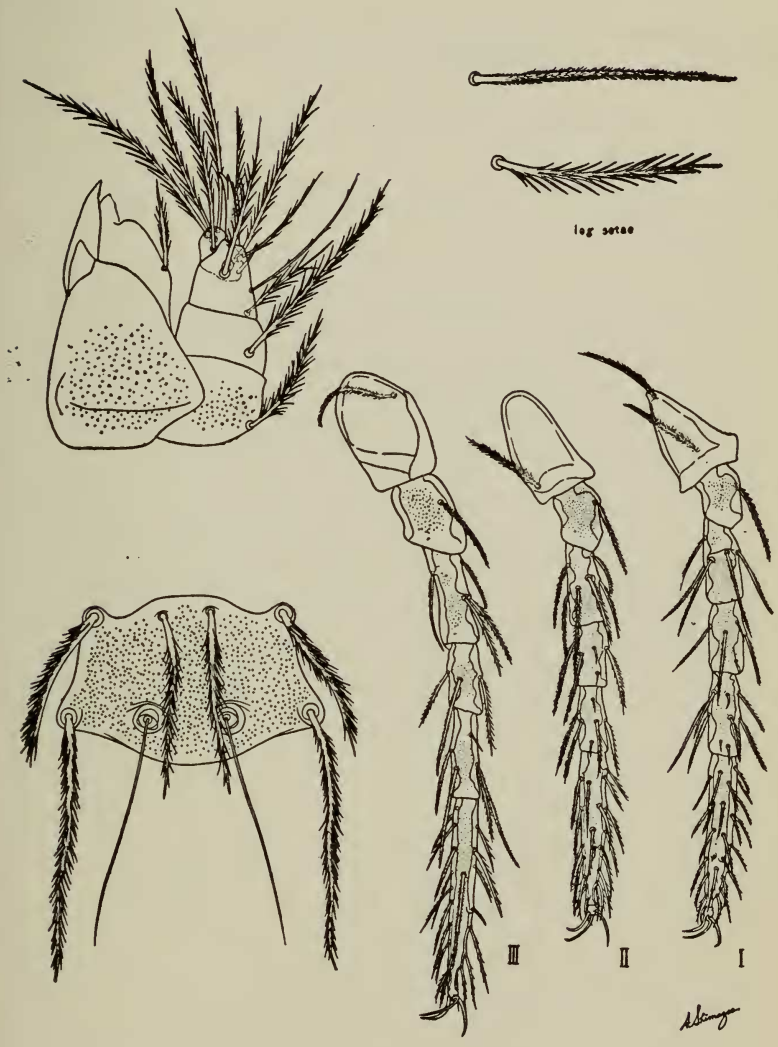

Fig. 1. *Shunsennia tarsalis*, n.g., n.sp.

Plate V